# QDSP-1100 Series

0.6-Liter Box PC with Intel® Core i3-3227U Processor

# **User's Guide**



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# **Safety Instructions**

# **■** Before You Begin

Before handling the product, read the instructions and safety guidelines on the following pages to prevent damage to the product and to ensure your own personal safety. Refer to the "Advisories" section in the Preface for advisory conventions used in this user's guide, including the distinction between Warnings, Cautions, Important Notes, and Notes.

- Always use caution when handling/operating a computer. Only qualified, experienced, authorized electronics service personnel should access the interior of a computer. The power supplies produce high voltages and energy hazards, which can cause bodily harm.
- Use extreme caution when installing or removing components. Refer to the installation instructions in this user's guide for precautions and procedures. If you have any questions, please contact our Post-Sales Technical Support.
- Access can only be gained by service persons or by users who have been instructed about the reasons for the restrictions applied to the location and about any precautions that shall be taken; and access is through the use of a tool or lock and key, or other means of security, and is controlled by authority responsible for the location.

#### **WARNING**



High voltages are present inside the chassis when the unit's power cord is plugged into an electrical outlet. Turn off system power, turn off the power supply, and then disconnect the power cord from its source before removing the chassis cover. Turning off the system power switch does not remove power to components.

# **■** When Working Inside a Computer

Before taking covers off a computer, perform the following steps:

- 1. Turn off the computer and any peripherals.
- 2. Disconnect the computer and peripherals from their power sources or subsystems to prevent electric shock or system board damage. This does not apply when hot swapping parts.
- 3. Follow the guidelines provided in "Preventing Electrostatic Discharge" on the following page.
- 4. Disconnect any telephone or telecommunications lines from the computer.

In addition, take note of these safety guidelines when appropriate:

- To help avoid possible damage to system boards, wait five seconds after turning off the computer before removing a component, removing a system board, or disconnecting a peripheral device from the computer.
- When you disconnect a cable, pull on its connector or on its strain-relief loop, not on the cable itself. Some cables have a connector with locking tabs. If you are disconnecting this type of cable, press in on the locking tabs before disconnecting the cable. As you pull connectors apart, keep them evenly aligned to avoid bending any connector pins. Also, before connecting a cable, make sure both connectors are correctly oriented and aligned.



#### **CAUTION**

Do not attempt to service the system yourself except as explained in this user's guide. Follow installation and troubleshooting instructions closely.

# ■ Preventing Electrostatic Discharge

Static electricity can harm system boards. Perform service at an ESD workstation and follow proper ESD procedure to reduce the risk of damage to components. We strongly encourage you to follow proper ESD procedure, which can include wrist straps and smocks, when servicing equipment.

You can also take the following steps to prevent damage from electrostatic discharge (ESD):

■ When unpacking a static-sensitive component from its shipping carton, do not

remove the component's antistatic packing material until you are ready to install the component in a computer. Just before unwrapping the antistatic packaging, be sure you are at an ESD workstation or grounded. This will discharge any static electricity that may have built up in your body.

- When transporting a sensitive component, first place it in an antistatic container or packaging.
- Handle all sensitive components at an ESD workstation. If possible, use antistatic floor pads and workbench pads.
- Handle components and boards with care. Don't touch the components or contacts on a board. Hold a board by its edges or by its metal mounting bracket.
- Do not handle or store system boards near strong electrostatic, electromagnetic, magnetic, or radioactive fields.

# ■ Instructions for Lithium Battery



#### WARNING

Danger of explosion when battery is replaced with incorrect type. Only replace with the same or equivalent type recommended by the manufacturer.

Do not dispose of lithium batteries in domestic waste. Dispose of the battery according to the local regulations dealing with the disposal of these special materials (e.g. to the collecting points for disposal of batteries)

# Voltage Ratings

The external power adaptor of the QDSP-1100 Series has the following voltage ratings:

■ Input: 100-240 VAC, 50-60 Hz

■ Output: 40W, +19VDC/2.1A output

## **Preface**

## ■ How to Use This Guide

This guide is designed to be used as step-by-step instructions for installation, and as a reference for operation, troubleshooting, and upgrades.

## Unpacking

When unpacking, follow these steps:

- 1. After opening the box, save it and the packing material for possible future shipment.
- 2. Remove all items from the box. If any items listed on the purchase order are missing, notify our customer service immediately.
- 3. Inspect the product for damage. If there is damage, notify our customer service immediately. Refer to "Warranty Policy" for the return procedure.

## ■ Regulatory Compliance Statements

This section provides the FCC compliance statement for Class B devices.

## **FCC Compliance Statement:**

This equipment has been tested and found to comply with limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reason able protection against harmful interference in residential installations. This equipment generates, uses, and can radiate radiofrequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television equipment reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the

receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by us could void the user's authority to operate the equipment.

#### NOTE



The assembler of a personal computer system may be required to test the system and/or make necessary modifications if a system is found to cause harmful interference or to be noncompliant with the appropriate standards for its intended use.

# ■ Maintaining Your Computer

#### **Environmental Factors**

#### **■** Temperature

The ambient temperature within an enclosure may be greater than room ambient temperature. Installation in an enclosure should be such that the amount of air flow required for safe operation is not compromised. Consideration should be given to the maximum rated ambient temperature. Overheating can cause a variety of problems, including premature aging and failure of chips or mechanical failure of devices.

If the system has been exposed to abnormally cold temperatures, allow a two-hour warm-up period to bring it up to normal operating temperature before turning it on. Failure to do so may cause damage to internal components, particularly the hard disk drive.

#### Humidity

High-humidity can cause moisture to enter and accumulate in the system. This moisture can cause corrosion of internal components and degrade such properties as electrical resistance and thermal conductivity. Extreme moisture buildup inside the system can result in electrical shorts, which can cause serious damage to the system.

Buildings in which climate is controlled usually maintain an acceptable level of humidity for system equipment. However, if a system is located in an unusually humid location, a dehumidifier can be used to maintain the humidity within an acceptable range. Refer to the "Specifications" section of this user's guide for

the operating and storage humidity specifications.

#### ■ Altitude

Operating a system at a high altitude (low pressure) reduces the efficiency of the cooling fans to cool the system. This can cause electrical problems related to arcing and corona effects. This condition can also cause sealed components with internal pressure, such as electrolytic capacitors, to fail or perform at reduced efficiency.

#### **Power Protection**

The greatest threats to a system's supply of power are power loss, power spikes, and power surges caused by electrical storms, which interrupt system operation and/or damage system components. To protect your system, always properly ground power cables and one of the following devices.

#### Surge Protector

Surge protectors are available in a variety of types and usually provide a level of protection proportional with the cost of the device. Surge protectors prevent voltage spikes from entering a system through the AC power cord. Surge protectors, however, do not offer protection against brownouts, which occur when the voltage drops more than 20 percent below the normal AC line voltage level.

#### ■ Line Conditioner

Line conditioners go beyond the overvoltage protection of surge protectors. Line conditioners keep a system's AC power source voltage at a fairly constant level and, therefore, can handle brownouts. Because of this added protection, line conditioners cost more than surge protectors. However, line conditioners cannot protect against a complete loss of power.

#### **■** Uninterruptible Power Supply

Uninterruptible power supply (UPS) systems offer the most complete protection against variations on power because they use battery power to keep the server running when AC power is lost. The battery is charged by the AC power while it is available, so when AC power is lost, the battery can provide power to the system for a limited amount of time, depending on the UPS system.

UPS systems range in price from a few hundred dollars to several thousand dollars, with the more expensive unit s allowing you to run larger systems for a

#### Preface

longer period of time when AC power is lost. UPS systems that provide only 5 minutes of battery power let you conduct an orderly shutdown of the system, but are not intended to provide continued operation. Surge protectors should be used with all UPS systems, and the UPS system should be Underwriters Laboratories (UL) safety approved.

# **Chapter 1**

# Introduction

### Overview

The QDSP-1100 Series is a Box PC with a volume of just 0.6-liter that is ideal for space critical applications. This embedded hardware platform is designed with Intel® Core i3-3227U processor which provides with excellent performance. System is supported with Intel® HM76 Express chipset, and DDR3 SO-DIMM up to 8 GB. Featured are 1x 2.5" SATA HDD /SSD, 2x GbE, 2x USB 2.0, 4x USB 3.0, HDMI, 2x DP, and S/PDIF..

#### Checklist

- QDSP-1100 Series
- Power Adapter
- Power Cord
- Driver CD
- Quick installation Guide
- VESA Mounting Kit (optional)
- Wireless LAN, 3G (optional)

#### **Features**

- Intel<sup>®</sup> Core i3-3227U Processor
- Intel<sup>®</sup> HM76 Express Chipset
- Support DDR3 1333 / 1600 MHz SO-DIMM up to 8 GB
- Support 1xHDMI, 2xDP, 2xGbE and S/PDIF, 2x USB2.0, 4x USB3.0
- Support 1x 2.5" SATA HDD / SSD
- Support up to triple-independent displays

# **■** Product Specifications

Construction	Aluminum			
CDLI/ Chinaat	Intel <sup>®</sup> Core i3-3227U Processor			
CPU/ Chipset	Intel <sup>®</sup> HM76 Express Chipset			
Memory	DDR3 1333/ 1600 SO-DIMM up to 8GB			
I/O Panel	■ Front I/O panel 1x Push button (w/LED) for power on/off 1x WiFi LED 1x HDD LED 2x USB2.0 4x USB3.0 1x S/PDIF ■ Rear I/O panel 1x DC JACK 2x RJ-45, GbE ports 2x DP 1x HDMI 1x WiFi / 3G Antenna ( Optional ) 1x Clear CMOS 1x Kensington Lock			
Storage	QDSP-1100 - 1x 500GB 2.5" SATA HDD QDSP-1101 - 1x 320GB 2.5" SATA HDD QDSP-1102 - 1x 32GB SSD			
Expansion	3G or WiFi			
Power Supply	Input: 100-240 VAC, 50-60 Hz Output: 40W, +19VDC / 2.1A output			
Cooling	System Fan			
OS Support	Windows 7 / Windows 8 / Linux			
Temperature / Humidity	Operating: 0°C to 50°C, 0%-90%, non-condensing Storage: -20°C to 80°C, 0%-90%, non-condensing			
Dimensions	130 x 35 x 111 mm (WxHxD)			
Weight	440 g			
Mounting	VESA mount ( Optional)			
Certifications	CE, FCC Class A			

Table 1 QDSP-1100 Series product specification

# ■ System tour

Refer to the diagrams below to identify the components of the system.

#### ■ Front Panel



Figure 1 Front Panel

#### **USB**

The USB (Universal Serial Bus) port is compatible with USB devices such as keyboards, mouse devices, cameras, and hard disk drives. USB allows many devices to run simultaneously on a single computer, with some peripheral acting as additional plug-in sites or hubs.

#### WiFi LED

The WiFi LED will light when the WiFi is on.

#### **HDD LED**

The hard disk LED blinks when data is being written into or read from the HDD.

#### S/PDIF

S/PDIF output for carrying digital audio signals out to the device.

#### **Power Switch**

The power switch allows powering ON and OFF the system.

#### ■ Rear Panel

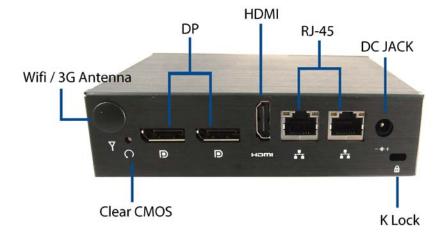


Figure 2 Rear Panel

#### **Ethernet**

The eight-pin RJ-45 LAN port supports a standard Ethernet cable for connection to a local network.

#### **DC Jack**

The supplied power adapter converts AC power to DC for use with this jack. Power supplied through this jack supplies power to the PC. To prevent damage to the PC, always use the supplied power adapter.

#### DP

DP is a display interface used to connect a video source to a display device such as a computer monitor or a television set.

#### **HDMI**

HDMI connector for display output

#### Wireless / 3G

1x reserved holes for wireless/3G antenna connection.

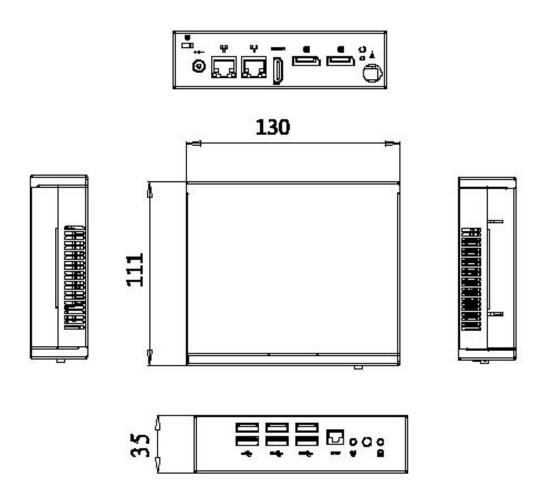
#### **Clear CMOS**

1x reset button for clear CMOS.

#### **Kensington Lock Slot**

The slot is used for attaching a lock-and-cable apparatus. Locks are generally secured in place with a key or combination lock attached to a rubberized metal cable.

# **Mechanical Dimensions**



130 x 35 x 111 mm (WxHxD)

Figure 3 Mechanical Dimensions

# **Chapter 2**

# **Getting Started**

- Setting up your PC
- **■** Connecting the monitor
  - Connect the DP/ HDMI cable from your display to the DP/ HDMI port.

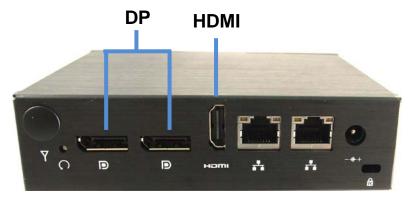


Figure 4 DP/ HDMI

## ■ Connecting USB mouse & keyboard

Your QDSP-1100 Series does not come with a keyboard and mouse, but you can use any USB keyboard or mouse with your computer.

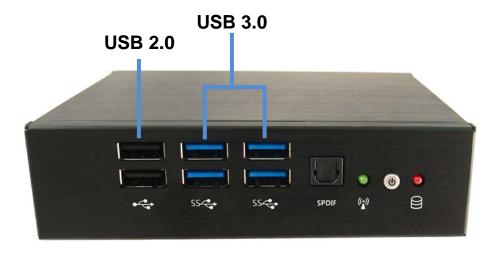


Figure 5 Connecting USB mouse & keyboard

#### **NOTE**



Using a third-party USB mouse or keyboard may require software drivers. Check the manufacturer's website for the latest software drivers.

## ■ Connecting to a network device

Connect one end of a network cable to the LAN port on the system rear panel and the other end to a hub or switch.

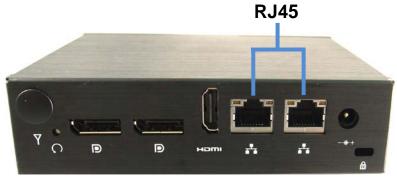


Figure 6 RJ45 connector

## ■ Turning on the system

- Connect the power adapter cable to the DC jack (DC IN) of the QDSP-1100 Series
- 2. Connect the power cable to the power adapter
- 3. Connect the power cable to a power outlet
- 4. Press the power switch on the front panel to turn on the system



Figure 7 Turning on the system

# ■ Mounting your PC to a monitor

1. Secure the VESA mounting kit to your monitor with four screws.

#### **NOTE**



To fasten the metal shelf, your monitor must comply with VESA75 or VESA100 standard. The VESA mounting kit is optional.

- 2. Place the QDSP-1100 Series on the VESA mounting bracket and make sure the bracket is hooked with the fins of the system housing.
- 3. Secure the screw with the VESA mounting bracket and make sure the QDSP-1100 Series is solidly secured to the display.

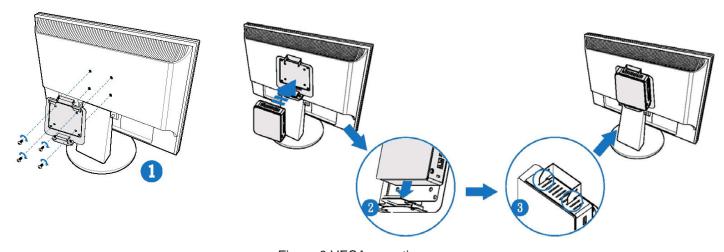


Figure 8 VESA mounting

#### **NOTE**



When mounting the unit on the wall with a display. The total weight of the unit and display won't exceed 7 Kg.

# ■ Anti-theft protection with a Kensington Lock

The QDSP-1100 Series has a Kensington lock slot for the Kensington MicroSaver. With the Kensington MicroSaver, a sturdy steel cable, you can attach your QDSP-1100 Series to a stationary object and protect your PC from theft.



Figure 9 Use a Kensington lock

# **Chapter 3**

# **AMI BIOS Setup**

### Overview

This chapter provides a description of the AMI BIOS. The BIOS setup menus and available selections may vary from those of your product. For specific information on the BIOS for your product, please contact us.



**NOTE:** The BIOS menus and selections for your product may vary from those in this chapter. For the BIOS manual specific to your product, please contact us.

AMI's ROM BIOS provides a built-in Setup program, which allows the user to modify the basic system configuration and hardware parameters. The modified data will be stored in a battery-backed CMOS, so that data will be retained even when the power is turned off. In general, the information saved in the CMOS RAM will not need to be changed unless there is a configuration change in the system, such as a hard drive replacement or when a device is added.

It is possible for the CMOS battery to fail, which will cause data loss in the CMOS only. If this happens you will need to reconfigure your BIOS settings.

## ■ Main Menu

The BIOS Setup is accessed by pressing the DEL key after the Power-On Self-Test (POST) memory test begins and before the operating system boot begins. Once you enter the BIOS Setup Utility, the Main Menu will appear on the screen. The Main Menu provides System Overview information and allows you to set the System Time and Date. Use the "<" and ">" cursor keys to navigate between menu screens.

Table 2 BIOS Main Menu

		BIOS SETUP UT	ILITY			
<b>Main</b> Ad	vanced	Boot	Security	Save & Exit		
Product Informat	ion					
Product Name	•	QDSP-1100 Se	eries			
BIOS Version		0.01 (x64)				
BIOS Build Da	te	07/25/2013	3			
ME FW Version	n	8.0.20.1513	3	→ ← Select Screen		
CPU Information Intel® Core i3-3227U Processor @1.90GHz		↑↓ Select Item  Enter: Select				
Microcode Revision	Microcode Revision 17		+- Change Opt.			
Processor Cores		2		F1: General Help		
Memory Information				F2: Previous Values		
Total Size		2048 MB (DDF	R3)	F3: Optimized Defaults		
Frequency	Frequency 1333 MHz		F4 Save & Exit			
System date		[Tue 01/01/20	13]	ESC Exit		
System time		[00:05:23]				
Access Level		Administrato	r			
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## **■** Advanced Menu

Table 3 Advanced Menu

		BIOS SETUP UT	TLITY			
Main Advanced	Boot	Security	Server	Mgmt	Save & Exit	
Onboard LAN 1 Controller		[Ena	abled]	→ ← Se	elect Screen	
Onboard LAN 1 Boot		[Disa	abled]	↑↓ Selec	ct Item	
Onboard LAN 2 Controller		[Ena	abled]	Enter: S	Enter: Select	
Onboard LAN 2 Boot	[Disabled]		+- Chan	+- Change Opt.		
Audio Controller	[Enabled]		F1: Gen	eral Help		
> Display Configuration				F2: Prev	vious Values	
> Power Management Configuration					mized Defaults	
> CPU Advanced Configuration > SATA Configuration				F4 Save	e & Exit	
> Intel(R) Rapid Start Technology			ESC Ex	it		
> USB Configuration						
> H/W Monitor  Version 2.15.1236. Copyright (C) 2012 American Megatrends, Inc.						

#### **Onboard LAN 1 Controller**

Options: Disabled, Enabled

**Onboard LAN 1 Boot** 

Options: Disabled, Enabled
Onboard LAN 2 Controller
Options: Disabled, Enabled

**Onboard LAN 2 Boot** 

Options: Disabled, Enabled

**Audio Controller** 

Table 4 Advanced Menu – Display Configuration

BIOS SETUP UTILITY						
Main Advanced	Boot Security	Server Mgmt Save & Exit				
Display Configuration Aperture Size DVMT Pre-Allocated DVMT Total Gfx Mem IGFX – Boot Type	[256 MB] [64 MB] [256 MB] [ VBIOS Default]	→ ← Select Screen  ↑↓ Select Item  Enter: Select  +- Change Opt.  F1: General Help  F2: Previous Values  F3: Optimized Defaults  F4 Save & Exit  ESC Exit				
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## **Aperture Size**

Options: 128MB, 256MB, 512MB

**DVMT Pre-Allocated** 

Options: 32 M, 64 M, 96 M, 128MB, 160 M, 192 M, 224 M, 256MB, 288 M,

 $320\ M$  ,  $352\ M$  ,  $384\ M$  ,  $416\ M$  ,  $448\ M$  ,  $480\ M$  , 512M , 1024M

**DVMT Total Gfx Mem** 

Options: 128MB, 256MB, MAX

**IGFX-Boot Type** 

Options: VBIOS Default, DP1,DP2, HDMI

Table 5 Advanced Menu –Power Management Configuration

		BIOS SETUP UT	ΓΙLITY		
Main Advanced	Boot	Security	Server	Mgmt	Save & Exit
Power Management Configuration  ACPI Sleep State  Restore AC Power Loss Resume By PCIE Device Resume By RTC Alarm  EUP Power Saving Mode  >Watchdog Timer Configuration	on	[S3 (Suspend [Power ( [Disable [Disable [Disable	Off] ed]	↑↓ Sele Enter: \$ +- Chai F1: Gel F2: Pre F3: Opt	Select  nge Opt.  neral Help  evious Values  timized Defaults  e & Exit
Version 2.	15.1236. Cd	opyright (C) 2012 A	American Meg	atrends, Ind	С.

### **ACPI Sleep State**

Options: Suspend Disabled, S1 (CPU Stop Clock), S3 (Suspend to RAM)

**Restore AC Power Loss** 

Options: Power Off, Power On, Last State

Resume By PCIE Device
Options: Disabled, Enabled
Resume By RTC Alarm
Options: Disabled, Enabled

**EUP Power Saving Mode**Options: Disabled, Enabled

**Watchdog Timer Configuration** 

**■** WDT Function 【Disabled】

Table 6 Advanced Menu –CPU Advanced Configuration

		BIOS SETUP U	TILITY		
Main	Advanced	Boot	Security	Save & Exit	
CPU Advanced EIST Active Processo Limit CPUID Ma Execute Disable Intel Virtualization	aximum e Bit	[Enabled] [ALL] [Disabled] [Enabled] [Disabled]		→ ← Select Screen  ↑↓ Select Item  Enter: Select +- Change Opt.  F1: General Help  F2: Previous Values  F3: Optimized Defaults  F4 Save & Exit  ESC Exit	
	Version 2.15.1236. Copyright (C) 2012 American Megatrends, Inc.				

### **EIST**

Options: Disabled, Enabled
Active Processor Cores

Options: All, 1

**Limit CPUID Maximum** 

Options: Disabled, Enabled

**Execute Disable Bit** 

Options: Disabled, Enabled

**Intel Virtualization Technology** 

Table 7 Advanced Menu –SATA Configuration

	BIOS SETUP UTI	LITY			
Main <b>Advance</b> o	<b>i</b> Boot	Securi	ty Save & Exit		
SATA Controller(s)  SATA Mode Selection SATA Controller Speed  Serial ATA Port 0  Software Preserve Port 0  SATA Device Type	[Enabled] [ AHCI] [ Default] Empty Unknown [ Enabled ] [ Hard Disk Driver]		→ ← Select Screen  ↑↓ Select Item  Enter: Select +- Change Opt.  F1: General Help  F2: Previous Values  F3: Optimized Defaults  F4 Save & Exit  ESC Exit		
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### **SATA Controller(s)**

Options: Disabled, Enabled

**SATA Mode Selection** 

Options: IDE, AHCI

**SATA Controller Speed** 

Options: Default, Gen 1, Gen 2, Gen 3

Port 0

Options: Disabled, Enabled

**SATA Device Type** 

Options: Hard Disk Driver, Solid State Driver

Table 8 Advanced Menu -Intel (R) Rapid Start Technology

		•	<i>'</i> .	<u> </u>	
		BIOS SETUP	UTILITY		
Main	Advanced	Boot	Security	Save & Exit	
Intel (R) Ra	pid Start Technology	[Disab	pled]		
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### Intel (R) Rapid Start Technology

Table 9 Advanced Menu –USB Configuration

	BIOS SETUP UTILITY				
Main <b>Advanced</b>	Boot	Securi	ty Save & Exit		
USB Configuration			→ ← Select Screen		
			↑↓ Select Item		
USB Devices:			Enter: Select		
1 Keyboard, 1 Mouse, 2 Hubs	+- Change Opt.		+- Change Opt.		
Legacy USB Support	[Enabled]		F1: General Help		
USB3.0 Support	[Enabled]		F2: Previous Values		
xHCI Hand-off	[Enabled]		F3: Optimized Defaults		
EHCI Hand-off	[Disabled]	[Disabled] F4 Save & Exit			
USB Mass Storage Driver Support xHCl Pre-Boot Driver	[Enabled] [Enabled]		ESC Exit		
xHCI Mode	[ Smart Aut	:0]			
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## **Legacy USB Support**

Options: Disabled, Enabled, Auto

**USB3.0 Support** 

Options: Disabled, Enabled

**xHCl Hand-off** 

Options: Disabled, Enabled

**EHCI Hand-off** 

Options: Disabled, Enabled

**USB Mass Storage Driver Support** 

Options: Disabled, Enabled

**xHCI Pre-Boot Driver** 

Options: Disabled, Enabled

**xHCI Mode** 

Options: Smart Auto, Auto, Disabled, Enabled

Table 10 Advanced Menu -H/W Monitor

BIOS SETUP UTILITY						
Main Advance	d Boot	Security	Save & Exit			
PC Health Status CPU Warning Temperature	[Disabled]					
CPU Temperature Memory Temperature System Temperature CPU FAN Speed +VCORE +VIN 5V +1.05V +3.3VSB +3.3V VBAT	: +0.776V	: +49 C : +44 C : +48 C  3766RPM : +0.776V : +11.913V : +5.044V : +1.056V : +3.376V  ∴ +3.376V  ∴ +49 C  ⇒ ← Select Screen  ↑↓ Select Item  Enter: Select  +- Change Opt.  F1: General Help  F2: Previous Values  F3: Optimized Defaults  F4 Save & Exit				
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## **CPU Warning Temperature**

Options: Disabled, 80  $^{\rm o}C$  , 85  $^{\rm o}C,$  90  $^{\rm o}C,$  95  $^{\rm o}C$ 

## **■** Boot Menu

Table 11 Boot Menu

BIOS SETUP UTILITY								
Main	Advanced	Boot	Securi	ty Save & Exit				
Boot Configuration Full Screen LOGO Setup Prompt Time Bootup NumLock S UEFI Boot  Boot Option Prioritie Boot Option #1 Hard Driver BBS Pr	Display eout State	[Disabled]  1 [On] [Disabled]  [ PO : SamSung HM160HI	1	→ ← Select Screen  ↑↓ Select Item  Enter: Select +- Change Opt.  F1: General Help  F2: Previous Values  F3: Optimized Defaults  F4 Save & Exit  ESC Exit				
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## **Full Screen LOGO Display**

Options: Disabled, Enabled

**Bootup Numlock State** 

Options: On, Off

**UEFI Boot** 

Options: Disabled, Enabled

**Boot Option #1** 

Options: SamSung HM160HI, Disabled

**Boot Option Priorities** 

Options: SamSung HM160HI, Disabled

# ■ Security Menu

Table 12 Security Menu

BIOS SETUP UTILITY								
Main	Advanced	Boot	Securi	t y	Save &	Exit		
Password Descrip	tion							
	istrator's password is set, asked for when entering S	→ ← Selec	t Screen					
If ONLY the User's password is set, then this is a power on password and must be entered to boot or enter Setup. In Setup the User will have					↑↓ Select Item			
Administrator rights  The password length must be in the following range:					Enter: Select +- Change Opt.			
Minimum Length 3					F1: General Help			
Maximum length 20				F2: Previous Values				
				F3: Optimiz	ed Defaults			
Administrator Passy	F4 Save & Exit							
User Password				ESC Exit				
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# ■ Save & Exit Menu

Table 13 Save & Exit Menu

BIOS SETUP UTILITY						
Main	Advanced	Boot	Security	Save & Exit		
Save Changes	and Reset		<b>→</b> ←	- Select Screen		
Discard Change	es and Reset	' '	↑↓ Select Item			
Caus Ontions				er: Select		
Save Options			+- Change Opt. F1: General Help			
Save Changes Discard Changes				F2: Previous Values		
Discard Orlange				Optimized Defaults		
Restore Default	ts		F4 \$	Save & Exit		
			ESC	C Exit		
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#### **Save Changes and Exit**

Exit system setup after saving the changes. Once you are finished making your selections, choose this option from the Exit menu to ensure the values you selected are saved to the CMOS RAM. The CMOS RAM is sustained by an onboard backup battery and stays on even when the PC is turned off. When you select this option, a confirmation window appears. Select [Yes] to save changes and exit.

#### **Discard Changes and Exit**

Exit system setup without saving any changes. Select this option only if you do not want to save the changes that you made to the Setup program. If you made changes to fields other than system date, system time, and password, the BIOS asks for a confirmation before exiting.

#### **Discard Changes**

Discards changes done so far to any of the setup values. This option allows you to discard the selections you made and restore the previously saved values. After selecting this option, a confirmation appears. Select [Yes] to discard any changes and load the previously saved values.

### **Load Optimal Defaults**

Load Optimal Default values for all the setup values. This option allows you to load optimal default values for each of the parameters on the Setup menus, which will provide the best performance settings for your system. The F9 key can be used for this operation.

#### **Load Failsafe Defaults**

Load Optimal Default values for all the setup values. This option allows you to load failsafe default values for each of the parameters on the Setup menus, which will provide the most stable performance settings. The F8 key can be used for this operation.

# **Chapter 4**

# **Driver Installation**

If your QDSP-1100 series does not come with an operating system pre-installed, you will need to install an operating system and the necessary drivers to operate it. After you have finished assembling your system and connected the appropriate power source, power it up using the power supply and install the desired operating system.

You can download the drivers for the QDSP-1100 Series from the Quanmax website at <a href="www.quanmax.com">www.quanmax.com</a> and install as instructed there. For other operating systems, please contact Quanmax.